

(SEQ ID NO: 4), Phe-Gly-Ile-Ala-Gly-Phe (SEQ ID NO: 5), Gly-Ile-Ala-Gly-Gln (SEQ ID NO: 6), and Gln-Gly-Ala-Ile-Ala-Gln (SEQ ID NO: 7).

13. (New) A cartilage repair composition for treatment of arthritis, comprising a peptide with a domain that mimics the cell binding of collagen, said peptide exhibiting cell binding greater than that of collagen, said peptide being selected from Gly-Thr-Pro-Gly-Pro-Gln-Gly-Ile-Ala-Gly-Gln-Arg-Gly-Val-Val (SEQ ID NO: 1), Gly-Pro-Gln-Gly-Ile-Ala-Gly-Gln-Arg (SEQ ID NO: 2), Gln-Gly-Ile-Ala-Gly-Gln (SEQ ID NO: 3), Gln-Gly-Ile-Ala-Gly-Gln-Arg (SEQ ID NO: 4), Phe-Gly-Ile-Ala-Gly-Phe (SEQ ID NO: 5), Gly-Ile-Ala-Gly-Gln (SEQ ID NO: 6), and Gln-Gly-Ala-Ile-Ala-Gln (SEQ ID NO: 7).

14. (New) A method for promoting osteogenic cell growth, comprising:

- (a) providing particles of hydroxylapatite;
- (b) coating said hydroxylapatite particles with a solution of a synthetic peptide that simulates the binding of collagen to cells;
- (c) incorporating said particles into a biologically compatible gel; and
- (d) exposing said gel to cells.

15. (New) The method of claim 14, wherein said peptide used in said coating comprises a peptide selected from Gly-Thr-Pro-Gly-Pro-Gln-Gly-Ile-Ala-Gly-Gln-Arg-Gly-Val-Val (SEQ ID NO: 1), Gly-Pro-Gln-Gly-Ile-Ala-Gly-Gln-Arg (SEQ ID NO: 2), Gln-Gly-Ile-Ala-Gly-Gln (SEQ ID NO: 3), Gln-Gly-Ile-Ala-Gly-Gln-Arg (SEQ ID NO: 4), Phe-Gly-Ile-Ala-Gly-Phe (SEQ ID NO: 5), Gly-Ile-Ala-Gly-Gln (SEQ ID NO: 6), and Gln-Gly-Ala-Ile-Ala-Gln (SEQ ID NO: 7).

No new matter is introduced by these amendments.